

PRELIMINARY
**Mt. Charleston Wilderness
Management Plan**



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U.S. Department of Agriculture
Forest Service
Intermountain Region
Humboldt-Toiyabe National Forest
Spring Mountains National Recreation Area

U.S. Department of the Interior
Bureau of Land Management
Nevada State Office
Southern Nevada District
Las Vegas Field Office

Introduction

Background

In 1964 the United States Congress established the National Wilderness Preservation System through the Wilderness Act of 1964, as enacted September 3, 1964, and amended October 21, 1978 (Public Law 88-577; 16 U.S.C. 1131-1136) as a system of federal lands "where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." This law was created to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States. Wilderness designation is intended to preserve and protect certain lands in their natural state. Only Congress, with Presidential approval, may designate lands as Wilderness. The Wilderness Act of 1964 defines Wilderness characteristics, the uses of Wilderness, and the activities prohibited within its boundaries.

Wilderness areas provide a contrast to lands where human activities dominate the landscape. No buffer zones are created around Wilderness to protect them from the influence of activities on adjacent land. Wilderness areas are managed for the use and enjoyment of the American people in a manner that will leave them unimpaired for future use and enjoyment as Wilderness, for their protection, preservation of their Wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as Wilderness.

Scope of the Wilderness Management Plan

This Wilderness Management Plan (WMP) is jointly prepared by the United States Department of Agriculture (USDA) Forest Service (FS) and the United States Department of Interior (DOI) Bureau of Land Management (BLM). Each agency has jurisdictional authority for separate portions of the Wilderness. The WMP is developed by way of a cooperative agreement by and between the agencies, with the FS as the lead agency for development of this WMP. The WMP provides the primary management direction for the Mt. Charleston Wilderness. The WMP provides specific direction for the management of the Mt. Charleston Wilderness over the next ten (10) years.

The Mt. Charleston Wilderness Area was designated by the U.S. Congress in 1989 (Nevada Wilderness Protection Act of 1989; PL 101-195) at 43,842 acres, and was amended in 2002 (Clark County Conservation of Public Land and Natural Resources Act of 2002; PL 107-282) to add 13,598 (11,423 to FS land and 2,175 to BLM land) acres for a total of 57,440 acres. The FS manages a total of 55,265 acres and the BLM manages a total of 2,175 acres. The Wilderness includes the Carpenter Canyon Research Natural Area and sensitive alpine areas. This plan addresses appropriate actions within and immediately adjacent to the Wilderness areas, such as Wilderness access and information provided to the public.

The land base area managed by the BLM is relatively small (2,175 acres) compared to the total Wilderness acreage of 57,440. The recreational and management activities that take place in the area managed by the BLM are not substantial.

The BLM has agreed to adhere to the management standards and guidelines established by the FS for management of the Mt. Charleston Wilderness, to the extent management direction does not conflict with the BLM's Las Vegas Resource Management Plan (RMP) or BLM regulations. The BLM has

contributed to the management direction contained in this plan and warrants that, with the inclusion of BLM-specific direction, the Mt. Charleston WMP does not conflict with the BLM's Las Vegas RMP and Record of Decision (1998) or BLM regulations.

RELATIONSHIP TO LAND AND RESOURCE MANAGEMENT PLANS

The BLM will adopt the Mt. Charleston WMP as a supplement to the BLM's Las Vegas RMP and Record of Decision. The FS will adopt the WMP as an amendment to the Land and Resource Management Plan (LRMP) for the Toiyabe National Forest (1996). The General Management Plan (GMP) for the Spring Mountains National Recreation Area (SMNRA) is an Amendment to the LRMP for the Toiyabe National Forest. This WMP will supplement forest-wide standards and guidelines in the Toiyabe LRMP and the GMP, as an amendment to the Toiyabe LRMP, to provide more specific, updated, and consistent direction for management of the Mt. Charleston Wilderness. The plan will tier from and be appended to the Toiyabe LRMP (FSM 2322.03(5)).

The GMP identifies Mt. Charleston Wilderness as Management Area 12. The following Management Area is removed from the GMP and replaced by this WMP:

Management Area 12 — Mt. Charleston Wilderness

Every FS forest plan must have management areas or geographic areas or both. The plan may identify designated or recommended areas as management areas or geographic areas (36 CFR 219.7). Management direction for a Wilderness must be stated in the Forest Plan as management area prescriptions with associated standards and guidelines. Each Wilderness is unique as established by law; therefore, each will be identified as a separate management area (FSM 2322.03). Management Area 12 is defined by and follows the boundary of the Mt. Charleston Wilderness, as Congressionally designated in 1989 and amended in 2002.

The amendment to the Toiyabe National Forest LRMP is a project-specific, non-significant Forest Plan amendment. The amendment will not change forest-wide direction (Forest Plan standards which apply to the entire Toiyabe National Forest); therefore, management direction contained in the Toiyabe National Forest LRMP will continue to remain relevant. Management direction contained in the Toiyabe Forest Plan is incorporated herein by references made to the SMNRA GMP in this WMP.

The National Forest Management Act of 1976 (16 U.S.C. §§ 1600-1614, August 17, 1974, as amended 1976, 1978, 1980, 1981, 1983, 1985, 1988 and 1990) mandates that management direction for Wilderness be incorporated into forest plans and also sets the standards for the content of Wilderness Plans (FSM 2320.1(6)). Management of BLM public lands is conducted pursuant to the Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996). Management of Wilderness on BLM public land is outlined in BLM Manual 6340, Management of Designated Wilderness (2012). The Wilderness Act of 1964 sets out mandates for use, prohibitions and provisions for Wilderness. Other authorities include, but are not limited to, the Organic Act, the Clean Air Act, the Multiple-Use Sustained Yield Act of 1960, the Federal Land Policy and Management Act of 1976, and the Historic Preservation Act of 1966.

Wilderness management direction in this plan is prepared as a part of the FS forest planning process as required by 36 CFR Part 219 and FSM 1922 and for the BLM as required by 43 CFR Parts 6300 and

8560. Implementation of the forest plan is accomplished through development of implementation schedules that include projects and activities designed to achieve and comply with the management standards and guidelines established for the designated Wilderness (FSM 2320). Wilderness management direction for the BLM is prepared as required by 36 CFR Parts 6300 and 8560 and the BLM 2008 NEPA Handbook (H-1790-1). Planning by both agencies is done in compliance with the National Environmental Policy Act (FSM 1950 and FSH 1909.15 and BLM 2008 NEPA Handbook (H-1790-1).

DEFINITIONS OF COMMON PLANNING TERMS

The FS is required to include plan components that guide future project and activity decision-making in the WMP, as defined in the Code of Federal Regulations (CFR) and Forest Service Manuals (FSM) and FS Handbooks (FSH). The plan components are defined as follow:

- “*Goals*” Goals are broad statements of intent, other than desired conditions, usually related to process or interaction with the public. Goals are expressed in broad, general terms, but do not include completion dates (36 CFR 219.7).
- “*Objectives*” are concise statements of planned results that respond to pre-established goals. An objective is a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets (36 CFR 219.7).
- “*Desired Future Conditions*” described what the forest should look like after implement of management direction contained in the plan. A desired condition is a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates (36 CFR 219.7).
- “*Guidelines*” are constraints on project and activity decision-making that allow for departure from its terms, so long as the purpose of the guideline is met (36 CFR 219.15(d)(3)). Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7).
- “*Standards*” A standard is a mandatory constraint on project and activity decision-making, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7). Management standards must be followed, while guidelines are preferred or advisable courses of action with more operational flexibility. Deviation from a standard would require a Forest Plan amendment; deviation from compliance with a guideline could simply be documented in project-level analysis.
- “*Monitoring Requirements*” are developed to determine whether the standards, guidelines, and prescriptions are effective in moving the Wilderness areas toward the desired conditions. The plan must describe a monitoring program for the plan area (36 CFR 219.6(b)) that establishes monitoring questions and associated performance measures. Monitoring questions must link to one or more desired condition, objective, or guideline. Not every desired condition, objective, and guideline must be associated with a monitoring question (FSH 1909.12). Monitoring information enables the responsible official to determine if a change in plan components or other plan content that guide management of resources on the plan area may be needed (36 CFR 219.12).

In addition to the foregoing plan components, the FS is required to make the following management determinations in a plan. As described below, because the land managed in this plan is Wilderness, these determinations are constrained by the very definition of Wilderness, legislative mandates, and limitations placed on management activities allowable within Wilderness.

- “*Suitability*” describes the appropriateness of applying certain resource management practices to a particular area of land and the suitability of that land for multiple uses and activities, based on the desired conditions applicable to the land. Regulations require the FS to determine which lands are suitable for timber production (36 CFR 219.7 and 11). The Mt. Charleston Wilderness is not suited for timber production by virtue of its enabling legislative mandates, including the Wilderness Act, which sets out prohibitions in Wilderness and instructs that management direction be established to preserve Wilderness character. The Wilderness Act prohibits commercial enterprise, road construction, and the use of aircraft or motorized equipment or mechanical transport in any Wilderness designated under the Act, except as necessary for the administration of the area for purposes of the Act and emergencies involving health and safety of persons within the area. The appropriateness of resource management practices will be limited to addressing activities allowable within Wilderness, as identified by the Wilderness Act and the specific legislation for the area.
- “*Management Area*” is an area with similar management objectives and a common management prescription. Every plan must have management areas. The plan may identify designated areas, such as Wilderness, as management areas. The FS has identified the Mt. Charleston Wilderness as one management area, identified in the GMP as Management Area 12.
- “*Management Prescriptions*” are defined as a composite of the specific multiple-use direction applicable to all or part of a management area that generally includes, but is not limited to goals, objectives, standards and guidelines, and probable management practices. For purposes of regional consistency, the management prescription that applies to this management area is identified as “Wilderness within a National Recreation Area.”
- “*Proposed and Probable Management Practices*” are specific activities, measures, courses of action or treatments within an identified management area. Forest plans do not make site-specific decision for specific activities; therefore any management practices in this plan are not commitments or decision. Project proposals and decisions require site-specific analysis. Any reference in this plan to proposed and probable management practices provide readers with a picture of what activities might be forthcoming in implementation of this plan.

Goals, objectives, desired future conditions, standards and guidelines are defined within each management area within this plan. In general, the plan achieves the following results:

- describes the existing conditions, features and uses in the Wilderness;
- describes the goals and objectives for management of the Wilderness;
- identifies management direction for the Wilderness as a separate management area with associated standards and guidelines;
- identifies and responds to issues developed through internal scoping of FS and BLM personnel and the public undertaken during the public involvement process for the environmental analysis in development of the plan;
- presents management strategies to maintain or improve the natural character of the Wilderness;

- provides specific direction for the management of various resources and activities within the Wilderness to ensure preservation of the area's Wilderness character;
- establishes a monitoring strategy to track the outcome of activities undertaken within the Wilderness.

Wilderness Characteristics

The Wilderness Act of 1964 defines Wilderness and mandates that the primary management direction is to preserve Wilderness character. Although Wilderness character is a complex idea and was not explicitly defined in the Wilderness Act, Wilderness characteristics are commonly identified as the following and include a fifth quality—Unique / Supplemental Values—values the Act says “may” be present:

- **Untrammeled**—Area is unhindered and free from modern human control or manipulation.
- **Natural**—Area appears to have been primarily affected by the forces of nature.
- **Undeveloped**—Area is essentially without permanent improvements or human occupation and retains its primeval character.
- **Outstanding opportunities for solitude or a primitive and unconfined type of recreation**—Area provides outstanding opportunities for people to experience solitude or primeval and unrestricted recreation including the values associated with physical and mental inspiration and challenge.
- **Unique / Supplemental Values**—Wilderness areas may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value. These supplemental features or values are complimentary to the overall Wilderness character and need not be present for an area to meet the definition of Wilderness.

This WMP preserves the areas' characteristics by:

- Identifying the conditions and opportunities for which the Wilderness areas would be managed.
- Creating specific directives and guidelines for managing resources and activities existing in the Wilderness.
- Identifying management needs outside of, and immediately adjacent to the Wilderness areas, including signing, staging areas, and access points.
- Assessing if adverse impacts are occurring to Wilderness character and mitigating all actions that may affect Wilderness values.
- Ensuring that proposed actions demonstrate no harm to the Wilderness character and other ecological and social values of Wilderness.

Wilderness Overview

The Mt. Charleston Wilderness is situated, in part, on the Spring Mountain National Recreation Area on the Humboldt-Toiyabe National Forest, managed by the FS, and, in part, on public lands administered by the Las Vegas Field Office of the Southern Nevada District of the BLM. The Wilderness is located in southern Nevada approximately forty miles west of the Las Vegas valley in Clark County. The Mt. Charleston Wilderness was originally part of an area known as the Charleston Forest Reserve established on November 5, 1906, by President Theodore Roosevelt under the authority of the Forest Reserve Act of 1891. The Mt. Charleston Wilderness is characterized by lofty rocky

mountain crags, deep and wide canyons, narrow slot canyons, steep hillsides, and sweeping vistas of mountains and valleys with acres of evergreen forests. These rugged mountains are known as the Spring Mountains, where there is an abundance of cold, fresh-water springs. Some of the identified geological features include Fletcher Canyon, Robbers Roost, and Mummy and Trough Springs. The Carpenter Canyon Research Natural Area is located in the southwestern portion of the Wilderness.

The Spring Mountains are known as a "Sky Island" because of their high elevation and isolation from the surrounding lowlands of a dramatically different environment. The altitudinal zonation of ecosystems creates an island of endemism, where organisms that may have been abundant in a larger area now are narrowly confined to and adapted for this relatively smaller area within an expansive desert environment of hundreds of square miles. Elevations in the Spring Mountains range from about 4,440 feet on the lowest slopes in the southwest part of the Wilderness area, to 11,916 feet at the summit of Charleston Peak, the highest elevation in the Spring Mountains. There are gentler slopes in the southwestern portion of the Wilderness.

The Wilderness is home to the most extensive stand of ancient bristlecone pine (*Pinus longaeva*) trees to be found in the Intermountain Region. In this Wilderness, there are approximately 18,000 acres of this species, known to be some of the oldest living organisms in the world. In the lower elevations, forests of Ponderosa pine (*Pinus ponderosa*) and white fir (*Abies concolor*) can be found, with Pinion-Juniper (*Pinus monophylla* – *Juniperus* spp.) woodlands on the lower slopes.

The town of Mt. Charleston in Kyle Canyon and the Las Vegas Ski and Snowboard Resort in Lee Canyon are located near the boundary of the Wilderness. Nevada State Routes 156, 157, 158, and 160 provide the majority of access to the Wilderness and there are several Forest Service System Roads leading off these primary routes that lead to the boundaries. A few cherry stem routes (a road that is excluded from the designated Wilderness by a non-Wilderness corridor having designated Wilderness on both sides) are associated with the Wilderness.

The Mt. Charleston Wilderness provides recreation opportunities that include hiking, technical rock climbing, backcountry skiing, snowshoeing, scenic viewing, backpacking, wildlife viewing, photography, hunting, and exploration. The long term trend is that use levels are slowly increasing in Wilderness nationally. There is not a lot of pack stock use and overnight use in this Wilderness, although the potential for increased visitation is high considering the area's scenic attractions, very close proximity to Las Vegas, and increasing visitor participation in outdoor recreation activities. Most use occurs during the warmer months of spring and summer because most of the Wilderness is situated at high elevations. Peak season would be approximately five months during the summer and one to two months during the shoulder seasons of fall and spring.

The ecological systems of the Wilderness are substantially free from the effects of modern civilization. The few exceptions to naturalness include the introduction of non-native invasive plants, primarily annual grasses. Impacts to solitude include frequent flyovers by passenger aircraft on approach to McCarran International Airport. There is some impairment to the "night sky" resource from the lights of the city of Las Vegas. There are private inholding in the Mt. Charleston Wilderness, as well as private parcels either adjacent to or in proximity to the Wilderness.

The area's varying climates and elevations provide important habitat for a wide spectrum of wildlife and plants. In addition to the Palmer's chipmunk (*Tamias palmeri*), there are several butterfly and

spring snail species, such as the Mt. Charleston blue (*Plebejus Shasta charlestonensis*) and the Spring Mountains spring snail (*Pyrgulopsis deaconi*), that only occur in the Spring Mountains. The Wilderness is host to many endemic plant species such as the hidden ivesia or Charleston Peak mouse tail (*Ivesia cryptocaulis*), which occurs exclusively in the alpine areas, including Charleston Peak, and the Charleston pussytoes (*Antennaria soliceps*), which occurs in the alpine and subalpine. Alpine endemics, including these two plant species, occur predominantly in the Mt. Charleston Wilderness. There are 24 FS Region 4 sensitive plant species known to occur in the Wilderness and an additional three FS Region 4 sensitive plant species that may occur given the presence of suitable habitats and the close proximity of known occurrences to the Wilderness boundaries.

Wilderness Management Objectives and Goals

The FS and the BLM will manage the Wilderness area through a single management plan to provide a maximum amount of management consistency in Wilderness protection across administrative boundaries.

Where possible, management, including any regulation of visitor uses, will appear seamless to the public. The BLM and FS will assist one another in Wilderness management activities including education and public outreach, emergency management, law enforcement, and monitoring.

The FS manages Wilderness to meet the following five primary objectives, as outlined in the Recreation, Wilderness, and Related Resource Management planning manual (FSM 2320—Wilderness Management). The following objectives are set out as broad-spectrum guidance in FSM 2320 to ensure Wilderness character and values remain unimpaired for present and future use and enjoyment as Wilderness, as stated in the Wilderness Act of 1964. These objectives conform to management objectives for BLM.

1. Maintain and perpetuate the enduring resource of Wilderness as one of the multiple uses of National Forest System land.
2. Maintain Wilderness in such a manner that ecosystems are unaffected by human manipulation and influences so that plants and animals develop and respond to natural forces.
3. Minimize the impact of those kinds of uses and activities generally prohibited by the Wilderness Act, but specifically excepted by the Act or subsequent legislation.
4. Protect and perpetuate Wilderness character and public values including, but not limited to, opportunities for scientific study, education, solitude, physical and mental challenge and stimulation, inspiration, and primitive recreation experiences.
5. Gather information and carry out research in a manner compatible with preserving the Wilderness environment to increase understanding of Wilderness ecology, Wilderness uses, management opportunities, and visitor behavior.

The BLM is guided by the following four primary objectives (referred to as goals in the BLM manual) in management of Wilderness, as defined in Appendix 1 of the BLM Wilderness management planning manual (BLM Manual 8561). These objectives are in conformance with FS management objectives.

1. Provide for the long-term protection and preservation of the areas' Wilderness character under a principle of non-degradation. The area's natural condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historic value present will be managed so that they will remain unimpaired.
2. Manage the Wilderness areas for the use and enjoyment of visitors in a manner that will leave the areas unimpaired for future use and enjoyment as Wilderness. The Wilderness resource will be dominant in all management decisions where a choice must be made between preservation of Wilderness character and visitor use.
3. Manage the Wilderness areas using the minimum tool, equipment, or structure necessary to successfully, safely, and economically accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades Wilderness values temporarily or permanently. Management will seek to preserve spontaneity of use and as much freedom from regulation as possible.
4. Manage nonconforming but accepted uses permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the area's Wilderness character. Non-conforming uses are the exception rather than the rule; therefore, emphasis is placed on maintaining Wilderness character.

Wilderness Management Actions

Wilderness management actions are based on national Wilderness management objectives; current situations and assumptions, and Wilderness-specific issues that were identified through internal and external scoping. All management actions are consistent with Wilderness laws, regulations, and agency policies. Wilderness laws, regulations and policies will be further consulted in the event of any future unforeseen issues and to validate revisions, updates or amendments to laws, regulation and policies. The WMP describes the goals, objectives, and desired future conditions of the Wilderness and management direction, including standards and guidelines, that would guide future project and activity decision-making if impairment to Wilderness character or resources becomes evident.

The FS will adhere to the standards and guidelines outlined in this WMP, in accordance with the level of compliance as set out in this document hereinbefore and in National Forest System Land Management Planning, New Plan Development regulations (36 CFR 219.7). The BLM will manage those portions of the Wilderness area on BLM administered lands consistent with standards and guidelines outlined in this WMP and in accordance with management direction identified in BLM Manual 8561 Wilderness Management Plans (1984) and BLM Manual 6340 Management of Designated Wilderness (2012), 43CFR 6300.

This document considers all resources contained in the Wilderness, as well as associated management issues and concerns as they relate to the Wilderness resource. Resource programs, such as Wild Horse and Burro, Fire Management, and Noxious and Invasive Weed Management, individually address the management goals and activity plans of their respective programs. Management direction as it relates to Wilderness is taken from specific resource programmatic documents and incorporated into this plan.

To the extent additional information is required, it is necessary to consult individual resource programmatic documents.

Management Direction

Management Area 12 - Mt. Charleston Wilderness

Management direction is intended to protect and enhance Wilderness values and characteristics that make the Wilderness a special place in order to provide quality Wilderness experiences. Management direction stresses the restoration and protection of rare plants and the natural, ecological, and visual character of the Wilderness. The Wilderness will be managed to conserve the health, diversity, integrity, and beauty of the ecosystem and managed to meet the intent and objectives of the Wilderness Act. An untrammelled, natural, undeveloped appearance and opportunities for solitude are paramount to providing a primitive, unconfined recreation experience.

Management direction set out in this plan addresses Wilderness resources and management considerations specific to Wilderness. Management of other resources occurring in the Wilderness not addressed in this plan will be managed according to general direction in the Toiyabe National Forest LRMP as amended by the GMP, the BLM RMP, the implementing regulations of the laws as they relates to each resource, and other programmatic documents. Examples of this include the following:

- Air quality is governed by The Clean Air Act, as amended, which directs the Forest Service and the BLM to protect the class II standards and attributes of the Mt. Charleston Wilderness (FSM 2320.1(7)), and in accordance with the Humboldt-Toiyabe Wilderness Air Quality Plan for Class II Wilderness.
- Night sky resources are managed in accordance with the Humboldt-Toiyabe Wilderness Air Quality Plan for Class II Wilderness and to reduce activities adjacent to Wilderness that might contribute to loss of night sky resources, acknowledging night sky pollution from the lights of the city of Las Vegas is unavoidable.
- Visual resources are managed in accordance with the Humboldt-Toiyabe Wilderness Air Quality Plan for Class II Wilderness. Wilderness is managed for the Visual Quality Objective (VQO) of “preservation” (Toiyabe National Forest LRMP 1986, page 11-6) with minimal impacts to visual resources. The BLM portion of the Wilderness will be managed to Visual Resources Management (VRM) Class I.
- Search and rescue is the primary responsibility of County Sheriff operations and approvals for entry by motorized equipment or mechanized transport involving life and safety are addressed in the Fire and Other Emergencies section of this plan.
- Cultural resources standards and guidelines will be consistent with procedures accepted by the State Historic Preservation Office (SHPO). Consultation with the SHPO will be conducted, as appropriate, in fulfilling responsibilities under Section 106 of the National Historic Preservation Act (NHPA) (16 USC 470 et seq.). Tribal relations and protection of heritage and cultural resources will be conducted in accordance with the following applicable federal laws, regulations and policies, as amended, revised or supplemented: the NHPA and implementing regulations 36 CFR 800 et seq., 36 CFR 60 et seq., and Executive Order 11593; the Archaeological Resources Protection Act of 1979, as amended (PL. 96-95; 16 USC 470aa-mm); Archaeological and Historic Data Preservation Act of 1974, as amended (PL 86-523, 16 USC 469-469c-2); the National Environmental Policy Act (42

USC 4321); the Antiquities Act of 1906 (16 USC 431 et seq.); the Historic Sites Act (16 USC 461); the Native American Graves Protection and Repatriation Act, as amended (PL 101-601; 25 USC 3001 et seq., 1990); Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (11/6/2000); the American Indian Religious Freedom Act, (PL 95-341, 92 Stat. 469 (8/11/1978); 42 USC 1996); FSM 2323.8; and other individual FS and BLM policies and management plans.

Note: The term “species of concern” is a summary term that represents multiple at-risk species lists maintained by the FS and BLM.

Aircraft

Goals

Manage the area to maintain opportunities for solitude as a Wilderness characteristic and to maintain a sense of remoteness and isolation, by monitoring and limiting, to the extent possible, aircraft over flights.

Objectives

Discourage flights over Wilderness within 2,000 feet of the ground surface, except in emergencies or for essential military missions. Cooperate with the Federal Aviation Administration, the National Oceanic and Atmospheric Administration, military authorities, and with local pilots to promote compliance with the 2,000 foot limit, to keep aeronautical charts current, and to reduce low level flights.

Management Direction

Guidelines

- (1) Aircraft may not land inside Wilderness boundaries except in cases of emergency.
- (2) The places, circumstances, and suitability of the use of aircraft for protection and administration of the Wilderness and its resources will be determined by the Line Officer authorized to approve such use (FSM 2326.1)
- (3) The use of aircraft will be scheduled to minimize impacts on Wilderness visitors.

Standards

- (4) In emergency situations involving an inescapable urgency and temporary need for speed beyond that available by primitive means, the use of aircraft will be authorized by the Forest Supervisor of the Humboldt-Toiyabe National Forest or the BLM Southern Nevada District Manager (see FSM 2326.04(c) and 2326.1, as revised, for further information).
- (5) In non-emergency situations, the use of aircraft, including non-emergency transport and supply and air drops, will be authorized by the Regional Forester for the Intermountain Region of the FS or the BLM Southern Nevada District Manager, and will require a MRDG analysis to determine if aircraft, including helicopters, will be the minimum tool necessary (see FSM 2326.04(b) and 2326.1, as revised, for further information).

Camping and Campfires

Goals

Camping will be allowed and monitored to foster Leave-No-Trace use ethics. Visitors will be directed to appropriate existing and durable sites.

Campsites will be maintained in compliance with management direction for site density or resource objectives, such as proximity to water or designated trails.

Protect Wilderness resources, including live and dead bristlecone pines, from removal/cutting for fuel (43 CFR Part 6300).

Objectives

Campsite density will not exceed more than an average of three Wilderness campsites per 1,000 acres.

Maintain all campsites so they do not exceed a 3.0 rating for condition class (3.0 is considered to be a heavily impacted site). Maintain campsites so groundcover and severely damaged trees do not exceed a rating of 2.0. Overall campsite rating is determined by adding the ratings for condition class, number of severely damaged trees, and square feet of impacted area, based on a standard protocol for monitoring. Campsite ratings for condition class are defined in campsite inventory forms for the Wilderness and were developed using national Wilderness monitoring protocols.

Desired Future Conditions

Campsites are at low-density levels and show minor impacts that will rarely persist year to year.

Campfires are prohibited in order to protect the Wilderness, its ecological values, and the characteristics that make the Wilderness a special place..

Management Direction

Guidelines

- (1) Encourage visitors to locate campsites away from and out of sight of trails, other campsites, and other points of interest.
- (2) Monitor campsites for density and condition class ratings.
- (3) Monitor and maintain data on success of campsite closures, rehabilitation, containment of the site, and other management actions.
- (4) Overnight camping is permitted; however, a permit system may be implemented if monitoring of resource impacts or adverse effects to Wilderness character indicates the need.
- (5) Implement a range of actions to ensure protection of bristlecone pine, threatened, endangered and proposed species, sensitive species and species of concern. For example, relocation of trails may be necessary to protect bristlecone pine from cutting for fuel or when monitoring indicates visitor use and trampling are affecting the vigor and reproductive capacity of sensitive plant species.

Standards

- (6) Campsite occupancy is limited to 14 days.

- (7) Camping is prohibited within 300 feet of trails, paths, springs, water sources, riparian areas, or cultural resource sites. Remove campfire rings that have been established near water sources or riparian areas.
- (8) Manage all use in the alpine areas if monitoring, which includes but is not limited to site and encounter inventories, determines that visitor use is having a negative impact on vegetation in the alpine areas, from soil compaction, erosion, vegetation loss and equestrian use that may be contributing to the introduction of non-native species.
- (9) Manage use levels to meet campsite density and campsite conditions class objectives and apply appropriate management actions as needed.
- (10) Campfires of any kind are prohibited within the Wilderness; this includes wood burning stoves, charcoal fires, packed in firewood, or fire pans. Camp stoves, such as portable liquid or gas fueled stoves used for the purpose of cooking, are permitted within the Wilderness.

Cave Resources

Goals

Cave resources are federally protected under the Federal Cave Resources Protection Act of 1988 (16 U.S.C. 4301) and will be managed to protect resources, provide for public safety, and provide recreational opportunities as set forth in the Act.

Possessing, destroying, defacing, or removing cave formations (or parts thereof) is prohibited. Disturbance to cultural resources as a result of caving is prohibited in accordance with the Archeological Resources Protection Act of 1979 (16 U.S.C. 470).

Objectives

Conduct non-invasive bat roosting/hibernating inventories on known caves with the Wilderness within the next five years, funding permitting. Survey results will aid in establishing long-term seasonal restrictions.

Desired Future Conditions

Caves are providing habitat for unique species.

Management Direction

Guidelines

- (1) Guidelines for accessing caves using rock climbing gear will be the same as those found in the rock climbing section.
- (2) Caves may be closed (permanently or seasonally) to access when necessary for human health and safety or to prevent degradation to wildlife, plants, cultural resources, or recreational opportunities. Closure methods are subject to MRDG to maintain Wilderness character.
- (3) Work cooperatively with interested groups (organizations, commercial guides/schools, and local climbing organizations) to evaluate caves. The inventory process should document all unique biological, hydrological, geological, mineralogical, paleontological, educational, scientific, cultural, and/or recreational values.

- (4) Caving activities should not get to a level where the vegetation around the cave openings is becoming denuded.

Standards

- (5) Allow recreational caving without a permit. No commercial services for caving will be permitted.
- (6) Tossing, throwing, or rolling rocks or other objects into caves are prohibited.
- (7) Allow access to all caves only from the beginning of March through the end of May; and from the beginning of September through the end of October. These seasonal restrictions will remain in place until bat roosting/hibernating inventories have been completed and long-term seasonal restrictions are established.
- (8) In order to prevent the introduction of white-nose syndrome, a fungus linked to bat mortalities in the eastern U.S., cavers are required to follow the National White-Nose Syndrome Decontamination Protocol (available at whitenosesyndrome.org).
- (9) All gates on caves and mines will be designed to provide for unrestricted access for bats. Temporary (test) gates of PVC or other light, impermanent material will be constructed first to determine bats' reaction to gate design, prior to final design and construction of permanent gates. Permanent gates will be compatible with Wilderness characteristics.
- (10) Prohibit alteration of cave and mine entrances (except for gating to protect cave resources) or their use as disposal sites for slash, spoils, or other refuse.
- (11) Consult with Indian Tribes and a FS archaeologist to ensure protection of caves that are of traditional and cultural significance.

Collection of Natural Resources

Goals

Protect bristlecone pine from vandalism, firewood cutting, removal for other purposes, and collection of dead "driftwood."

Management Direction

Standards

- (1) Collection of natural resources within Wilderness is prohibited, exceptions include:
 - Scientific purposes. Collection of threatened, endangered, and sensitive plant and wildlife species for academic, scientific, or research purposes requires a permit from the Regional Forester or the BLM District Manager and a permit from the U.S. Fish and Wildlife Service (FWS) (50 CFR 17.22), except for traditional use by American Indians.
 - Native American Indian gathering or tending native plants or materials for personal use, which may be done without obtaining a use permit;
 - As authorized by FS permit. The authorities for permits for collection are outlined in FSH 2409.18, Ch. 82.1 and 87.05; FSM 2404.28; and FSM 2462; and FSH 2609.25, Ch. 4.03, and as outlined in other FS and BLM policies.

Environmental Education and Interpretation

Goals

Utilize education and interpretation as a proactive approach in managing visitor activities that may impact preservation of the Wilderness character.

Educate the public to the value of Wilderness, not just as a non-motorized recreation area, but as a place of natural processes and of personal risks.

Incorporate Wilderness education principles in brochures, on the BLM and FS websites, on agency maps, at visitor centers, or on other educational materials, which describe basic interpretive information about the Wilderness areas (e.g., safety, Wilderness character, Wilderness ethics, Wilderness values, Leave-No-Trace, sensitive resources, noxious weeds, or location information).

Agency visitor maps may be produced to include trails, descriptions, and interpretive information.

Desired Future Conditions

Trailheads are signed to provide interpretive and educational information, as well as identify use restrictions.

Management Direction

Guidelines

- (1) Interpretive information may be included on trailhead information signs, but will not be located on signs in the Wilderness.
- (2) No interpretive trails will be designated.
- (3) Coordinate with the US Geological Survey (USGS) to remove from future USGS map products, vehicle routes depicted within Wilderness boundaries.
- (4) The primary purpose of educational activities conducted in the Wilderness should be focused on Wilderness, environmental, or other site-specific education, and group size should not exceed 15.
- (5) If use levels related to group educational activities increase so that visitor encounter standards are exceeded, educational groups will be limited to no more than two per month within the Wilderness.

Fire and Other Emergencies

Goals

Fire management objectives in the Wilderness will be structured in accordance with the current BLM Las Vegas Field Office Fire Management Plan (FMP) and the FS Humboldt-Toiyabe National Forest FMP.

Allow fires to play their natural ecological roles where consistent with the protection of public safety, private property, developed facilities in surrounding areas, and Wilderness resources and character.

The agencies will consider the natural role of fire within the ecosystem in fire management decisions, using a full range of fire management responses based on ecosystem factors, safety, and prescription criteria.

The County Sheriff has primary responsibility for search and rescue (SAR) operations.

The safety of the victim and the rescuers are considered priority in emergency situations.

Desired Future Conditions

Wildland fires that do not pose a direct threat to public safety or developed areas are managed under less than a full suppression strategy, taking into consideration the role of wildland fire as an essential ecological process and natural change agent. Every fire receives a response and a Wildland Fire Decision and Risk Assessment is utilized to determine the management response to any incident.

Management Direction

Guidelines

- (1) Determine actions for each wildland fire that are consistent with the protection of Wilderness resources and ensure the safety of firefighters, the public, and protection of private property and developed facilities in surrounding areas. Actions will be based on site factors, including fuel loading and fire behavior, protection of natural and cultural resources, and the circumstances under which a fire occurs. Lightning caused fires that do not pose a direct threat, as stated herein, may be allowed to assume their natural role in the environment.
- (2) Fires may be managed using any of the following suppression strategies or a combination thereof: confinement, containment, control.
- (3) “Leave No Trace” principles will be employed in the Wilderness. All evidence of human activity will be removed or rehabilitated to the maximum extent possible.

Standards

- (4) Prior approval from the Forest Supervisor of the Humboldt-Toiyabe National Forest or the BLM Southern Nevada District Manager must be sought to use motorized equipment or mechanized transport in Wilderness in emergency situations (FSM 2326.04c and 2326.1).
- (5) Use Minimum Impact Suppression Tactics (MIST) and assign Resource Advisors, as warranted, to Wilderness fires to minimize impacts to Wilderness character. Implement direction in the FS or BLM Fire Plan.
- (6) The FS allows water to be dropped from aircraft or buckets (considered to be a landing), if authorized by the Forest Supervisor. The BLM allows water to be dropped from aircraft without the Southern Nevada District Manager’s authorization.
- (7) Prior approval from the FS Forest Supervisor or the BLM District Manager must be sought to use retardant in Wilderness areas. The FS use of fire retardant may require a post-fire assessment per the protocols outlined in the 2011 Nationwide Aerial Application of Fire Retardant on National Forest System Land.
- (8) The FS or the BLM may use planned ignitions as a tool to restore natural ecosystems as necessary in the Wilderness. The use of planned ignitions to restore natural ecosystems will require site-specific NEPA and MRDG analyses, in conformance with the minimum requirements provision of the Wilderness Act, with documented, pre-planned and specified burn conditions.

- (9) An interdisciplinary analysis will be conducted for all fires larger than 500 acres to determine rehabilitation needs. Passive rehabilitation will be used to repair and rehabilitate effects from fire. Active rehabilitation work will occur only to rehabilitate the effects of fire suppression activities and to stabilize soil to minimize risk to downstream human life or property or to onsite cultural or biological resources, and to prevent the site from becoming dominated by exotic species. The line officer will determine if interdisciplinary analysis is required for fire less than 500 acres.
- (10) Emergency stabilization will be completed when it is necessary to prevent loss of soil and onsite productivity, loss of water control and deterioration of water quality, or when onsite life or property are threatened.
- (11) Emergency stabilization and rehabilitation activities will take place in accordance with the agencies current Watershed Protection and Management Emergency Stabilization – Burned Area Emergency Response policies (FSM 2523) and in accordance with other FS and BLM policies.
- (12) Wildfires will be allowed to burn, unless they threaten persons or property outside RNA or pose a health of safety issue.
- (13) No cleanup or reforestation following wildfires will be authorized.

Geocaching

Management Direction

Guidelines

- (1) Outreach geocaching restrictions and allowances information to the geocaching communities.
- (2) Direct visitors wishing to participate in traditional geocaching to locations outside of Wilderness.

Standards

- (3) Traditional geocaching and letterboxing will not be allowed, however virtual geocaches will be an accepted activity within Wilderness, to the extent the virtual geocache is not creating resource impacts.
- (4) Geocaching of any kind is prohibited in the RNA.
- (5) Remove traditional geocaches and letterboxes when encountered and request the geocache sponsor to remove the site listing from the internet. If a virtual geocache is located in a sensitive area, request the geocache sponsor to remove the site listing from the Internet.

Group and Commercial Services

Goals

Commercial use permits that are allowed within the Wilderness must be shown to meet an identified public need, and to meet the agencies' objectives and provide benefits to the Wilderness resource.

Assess potential commercial services of the Wilderness areas for their economic importance and prevent negative impacts on Wilderness characteristics.

Allow for special provision land uses as determined by laws, regulations, and the agencies' policies and management plans, while minimizing developments, degradation to naturalness, and other impacts to Wilderness resources.

Desired Future Conditions

Stock use is managed to reduce impacts to endemic species, and vegetation.

Outfitter/guide permits are at appropriate use levels and in appropriate areas.

Management Direction

Guidelines

- (1) Use permits may allow outfitter guide services for hiking, equestrian, climbing, as well as other activities. Permits will only be issued following a needs assessment or capacity analysis to determine if outfitter guide services are feasible for the Wilderness.
- (2) Manage outfitter guides to ensure they are not exceeding a threshold that will have a negative impact on Wilderness character, which may include limiting the number of days that outfitter guides are permitted and may include limitations on the group size. The threshold for such limitations will be determined through monitoring outfitter guide use (encounters or changes in site conditions) and impacts therefrom.
- (3) Identify areas and destinations of operations in all commercial use permits.

Standards

- (1) Require use permits for outfitter guides and commercial horseback operators. Use permits may authorize overnight camping for commercial guide services in the Wilderness. Wilderness permits are currently not required for overnight use; however, if in the future Wilderness permits are required for such use, guides will be required to obtain permits.
- (2) Include restrictions in outfitter guide and organized trail ride use permits for the protection of vegetation and to maintain solitude character.
- (3) Outfitter guide and commercial horseback operators will only be allowed to use the South Loop, Bonanza, and Trail Canyon Trails.
- (4) On the South Loop Trail, outfitter guide permittees (horseback) will be limited to 30 visitor days per year, for all outfitter/guide groups combined. The maximum group size is five people. This direction is included in outfitter/guide permits.
- (5) Use permits will be required for pack or saddle stock group use for organized trail rides in the Wilderness. Groups will be limited to a combination of people and stock not to exceed 25, with no more than 15 stock animals in any one group. Limitations will be placed on pack or saddle stock if monitoring (encounters or changes in site conditions) determines the need for such limitations.
- (6) Pack and saddle stock for recreational organized trail rides are limited to day use on all of the South Loop Trail and on the North Loop Trail from Trail Canyon trail junction to Charleston Peak.
- (7) Require the use of weed-free feed or pellets for stock animals (FS Order Number 04-00-097) and in accordance with other FS and BLM policies and closure orders.

- (8) Require permits for publicized and/or organized events with 15 or more participants if any portion of the activity takes place within the Wilderness.
- (9) Competitive events are prohibited in the Wilderness.
- (10) Do not permit competitive events, training events, and contests (FSM 2323.13h).
- (11) Do not permit filming for commercial purposes, guidebooks, television, or film, as instructed by Forest Service national direction.

Heritage, Archaeological and Cultural Resources and Tribal Relations

Goals

Protect and preserve the outstanding archaeological and historic resources of these areas while allowing for visitor enjoyment of those resources.

Develop appropriate management practices to eliminate or reduce adverse effects to historic and prehistoric sites and places.

Recognize the Wilderness is considered by Southern Paiute and Chemehuevi tribes to be part of their traditional lands and would likely contain areas and sites of traditional and cultural significance, sacred sites, and cultural resource sites important to these tribes.

Maintain and enhance tribal relations.

Facilitate appropriate use by Native American tribes, communities and traditional practitioners.

Desired Future Conditions

Heritage resources (including traditional use by American Indians and landscapes) that are found to be contributing components to wilderness character, where authorized by law or regulation, are protected.

Management Direction

Guidelines

- (1) Identify, monitor, and manage significant heritage resources.
- (2) Continue consultation with affected Indian Tribes.
- (3) When appropriate, coordinate heritage resource management activities with local Indian Tribes and other interested parties.
- (4) Interpret heritage resources and cultural history outside of Wilderness. Signs may be present within Wilderness in very rare cases, for resource protection only.
- (5) Allow scientific use consistent with the National Historic Preservation Act, Archaeological Resource Protection Act, FSM 2323.8, Forest Plan direction, and BLM Manual 5340.
- (6) Facilitate traditional Native American use practices that are not in conflict with the Wilderness Act.
- (7) Reference the *Consultation Handbook for Nuwuvi (Southern Paiute)*, the *Spring Mountains National Recreation Area*, and the *Desert National Wildlife Refuge Complex* to establish government-to-government protocols for the management of traditional resources in Wilderness, when appropriate.

Standards

- (8) Ensure American Indian access to access plants and traditional-cultural and religious sites.
- (9) Ensure that fire retardant is not dropped on traditional-cultural or sacred sites; unless there is a threat to human safety or private property, consult first, prior to retardant drops, with local Indian Tribes and a FS archaeologist to determine the most appropriate action based on site locations.
- (10) Ensure cultural resources are not utilized or damaged by trail maintenance. Confine maintenance of trails that cross cultural resource sites to existing trail treads. Material from cultural resource sites will not be used as fill or construction material during trail maintenance activities.
- (11) Consult with Indian Tribes and a FS archaeologist to ensure protection of caves that are of traditional and cultural significance.
- (12) Require permits for any ground disturbing archaeological study under the Archaeological Resources Protection Act. An MRDG analysis will be required to determine the minimum tool for ground disturbance, and the resulting proposal is subject to NEPA compliance.

Horseback Riding (Recreational) and Pack Stock Animals

Goals

Riders and pack stock animals traveling on trails designated for such use will be encouraged to utilize “Leave No Trace” practices (e.g., do not travel off trails so as to not create new trails, do not travel in washes, and do not tie or high-line horses and pack animals out of sight of trails, streams, campsites and other points of interest).

Desired Future Condition

Horse use is managed to reduce impacts to endemic species and vegetation.

Management Direction

Guidelines

- (1) Monitor the effects of cross-country equestrian use occurring off designated trails to determine if degradation of off-trail areas may necessitate trail closures or issuance of permits for recreational equestrian use.
- (2) Prohibit, to the extent possible, species of domestic pack stock animals known to carry catastrophic or chronic diseases in the Wilderness, to prevent transfer of disease to native wildlife.
- (3) Prohibit, to the extent possible, the grazing of recreational pack stock animals.
- (4) Protect meadows from recreational stock grazing by requiring camping away from meadows.

Standards

- (5) Limit recreational horseback riding to trails specifically designated for equestrian use.
- (6) Do not permit recreational stock overnight camping use.
- (7) Do not allow marking of trails with materials, such as paint, blazes, clothespins

and flagging.

- (8) Require the use of packed-in and certified weed-free feed, or pelleted feed (FS Order Number 04-00-097) and in accordance with other FS and BLM policies and closure orders.
- (9) Pack and saddle stock are limited to the South Loop Trail and on North Loop Trail from Trail Canyon trail junction to Charleston Peak.
- (10) Discontinue equestrian use in the alpine if monitoring determines that equestrian use is having a negative impact on vegetation.

Hunting and Trapping

Goals

Allow hunting and trapping in the Wilderness, as administered and licensed by the State of Nevada Department of Fish and Game.

Management Direction

Standards

- (1) Game may only be removed by means of non-mechanized methods such as packing out on backpacks or horseback. No wheeled or mechanized game carts are allowed in Wilderness.
- (2) The creation or construction of permanent hunting blinds is not allowed (43 CFR 6302.20(f)). However, portable or “pop-up” hunting blinds may be temporarily allowed for a period of 14 days during the hunting season of use if they are packed or carried in and out and do not require the disturbance or destruction of native soil, rock, or vegetation. Portable and “pop-up” hunting blinds must be attended or occupied at least some portion of a 10 day period within the 14 day period of use. If hunting blinds are not attended or occupied for 10 days, they will be considered unattended property and/or permanent structures and will be subject to removal by the BLM or FS and subject to disposition under the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 484(m)).
- (3) Portable or “pop-up” hunting blind carried into the Wilderness area must have affixed to the blind a name, address, phone number, the date the blind was placed, and the dates the blind will be unattended or unoccupied.

Minerals

Goals

Wilderness areas are specifically withdrawn from all forms of appropriation under the mining and mineral leasing laws; however, valid existing rights prior to January 1, 1984, are preserved.

Provide direction for the management of mineral activities in Wilderness where there are valid existing rights in accordance with Forest Service Manual (FSM 2800 and 2320) and the Code of Federal Regulation (36 CFR 228, 292, and 293).

Mining operating plans will address Wilderness values and ways to protect them. Reclamation efforts will serve to return the land as closely as possible to its natural condition.

Management Direction

Guidelines

- (1) Conduct validity exams on all unpatented mining claims within the Wilderness
- (2) Determine the levels of reclamation activities involving mine closures that are necessary to restore or rehabilitate surface disturbances caused by heavy machinery used in mining operations.

Standards

- (3) Restrict mineral collecting to scientific purposes only and require use permits for mineral collecting outside of valid existing claims with approved operating plans.
- (4) Prohibit all hazardous materials.

Noxious Weeds and Non-native Invasive Species

Goals

Strive to sustain only native species in the Wilderness. Noxious weeds, as designated by the Nevada Department of Agriculture (under Nevada Revised Statute 555) and by the USDA-APHIS (under the Plant Protection Act of 2000), are given priority for response and treatment.

Maintain native plant distribution and abundance through the reduction of noxious and non-native invasive species in an effort to retain the areas' natural and primeval character.

Objectives

Within five years of approval of this plan, a Weed Management Plan will be developed and approved that includes specific weed prevention and control strategies, funding permitting.

Desired Future Conditions

The Wilderness is maintained as free from weeds as possible.

Management Direction

Guidelines

- (1) Treat areas for noxious and non-native species as monitoring and visitor use mandates in accordance with a Weed Management Plan and an MRDG analysis.
- (2) Scrutinize activities that facilitate the introduction or spread of noxious and non-native species to determine if the activity should be disallowed, or if special stipulations will be satisfactory to mitigate the activity.
- (3) Monitor increase of noxious and non-native plant populations in the alpine to identify the need for any trail closures and restrictions on access.
- (4) Place emphasis on controlling small weed infestations with the potential to spread and displace native plants. Place emphasis on prevention, by frequent monitoring of new invaders. Treat these populations while they are small and before they become established.
- (5) Only use herbicides or pesticides when no other options are practical and then use the least persistent chemical or biological treatment that is able to control the infestation in

accordance with management objectives. Avoid use in habitat for species of concern whenever possible.

- (6) Give preference to the use of manual weed removal using hand tools. Allow for flexibility in management decisions, recognizing removal using hand tools may be ineffective on some species, may result in greater ground disturbance and visual impacts, and be detrimental to sensitive plant species near or adjacent to the weeds.
- (7) Reseeding/revegetation will be accomplished with native species of local genetic stock. Seed used for restoration actions must be weed-free.

Standards

- (8) On FS land, pesticide and herbicide use will require a MRDG analysis and a Pesticide Use Proposal (FS-2100-2) approved by the Regional Forester. On BLM land, use of pesticides and herbicides will be conducted as approved in the BLM “Vegetation Treatments Using Herbicides on BLM Lands in the 17 Western States” and will require the approval of a Pesticide Use Proposal, signed by the Assistant District Manager, the state weeds coordinator, and the Associate State Director. Application techniques should employ the most primitive methods where possible, in accordance with an approved MRDG analysis.

Personal Property, Refuse, or Vandalism

Management Direction

Guidelines

- (1) Items that are not historically or culturally significant, as determined by an agency archaeologist, will be considered unattended personal property or refuse.
- (2) Unattended personal property not associated with an active camp or at the base of an active climb, including geocaches and rock climbing gear, will be removed by BLM or FS personnel and held at the appropriate office. If possible, the owner of the personal property will be contacted to retrieve it.
- (3) Remove paint or marks on rock from graffiti, paintballs, or other forms of vandalism quickly to prevent proliferation, using least intrusive methods with materials and personnel transported into the Wilderness by foot or pack animal.
- (4) Examine graffiti sites to assure that cultural resources are not present on the affected site. Removal of graffiti within ten feet of rock art will require separate, site-specific analysis under consultation with an archaeologist and Native American representative.
- (5) If an illegal dump, marijuana grow or other subversive act is discovered inside the Wilderness boundaries, management will conduct the necessary reclamation activities, including an MRDG analysis and NEPA compliance, if necessary.

Recreation

Goals

Provide for the use and enjoyment of the Wilderness areas while maintaining outstanding opportunities for primitive and unconfined recreation, including solitude, through minimal visitor use regulations and minimal on-the-ground developments.

Manage the Wilderness to allow for recreation use at levels that are ecologically sustainable.

Provide a range of opportunities for use and solitude across the Wilderness landscape.

Assure that in areas of concentrated use that use does not expand or enlarge spatially.

Manage the majority of the Wilderness at a low density of recreational use insuring the highest quality of pristine Wilderness.

Assure no degradation in resources or experiential quality.

Desired Future Conditions

The highest opportunities for solitude, predominately free from evidence of human activities, are provided. Encounters with other visitors while traveling or camping are very infrequent. The environment offers the highest degree of challenge, self-reliance, and risk.

Management focus is on sustaining and enhancing the natural ecosystem. Management actions include direct, on-site actions and site-specific regulations for unusual cases where resources require higher levels of protection. Indirect methods of accomplishing management objectives predominate with exceptions for insuring visitor use is maintained at low levels to insure impacts are contained and do not persist.

Recreation use is managed so as not to impact the delicate and unique area.

General recreation opportunities are increased to the extent they are not inconsistent with preservation of Wilderness character.

Management Direction

Guidelines

- (1) Identify limiting factors that may lead to site-specific restrictions, mitigations, or reductions in use.
- (2) Maintain existing opportunities for solitude by monitoring visitor use patterns that trigger need for management action.
- (3) In heavily impacted areas, identify durable campsites and encourage visitors to use these sites.

Standards

- (4) Establish the recreation carrying capacity for the Wilderness.
- (5) Limit recreation hiking groups to no more than 15 participants and ensure larger groups are not splitting into smaller groups to circumvent this restriction. A limitation on the number of recreation hiking groups in a given area at any one time will be considered because of the proximity of the Wilderness to urban areas.
- (6) If total use in any area increases by 50% or more, based on standard monitoring protocols, assess impacts associated with the use and make determinations if further management

actions are needed to maintain desired Wilderness character. Monitor total use levels to determine the correlation between use levels, resource impacts and effects on the opportunity for solitude.

- (7) Require refuse and inorganic waste be removed from Wilderness; ensure recreationists employ “Pack in, Pack out, Leave No Trace” principles.

Research

Goals

The Wilderness areas are available for conducting basic and specific inventory, monitoring, research, and education.

Management Direction

Guidelines

- (1) If research proposals will not contribute to improved management of the area as Wilderness, the activity will be referred to lands outside the Wilderness.

Standards

- (2) Permits will be required for researchers and educators interested in conducting activities in Wilderness and all activities will be conducted in a manner consistent with section 4(c) of the Wilderness Act. Researchers will be required to provide a copy of findings to the FS and the BLM.

Research Natural Area

Goals

Manage the Research Natural Area (RNA) to retain its natural and scientific values.

Desired Future Conditions

The area is managed and protected for research, study, observation, and monitoring; educational activities that are not destructive or manipulative; and to ensure unmodified conditions.

The RNA contributes to:

- preservation and maintenance of genetic diversity;
- protection against serious environmental disruptions;
- the study of succession;
- baseline controls for research measuring ecological and hydrological effects of land management manipulation techniques and practices; and
- educational activities.

Management Direction

Standards

- (1) Prohibit the following activities in the RNA: camping, campfires, hunting, trapping, geocaching, rock climbing, canyoneering, structures of any kind, target shooting, trail

construction, and recreational activities that create or have the potential to create disturbance to soil, water, flora, fauna, and other resources.

- (2) Prohibit commercial uses within the RNA, except for outfitters/guides passing through the RNA on the Mt. Charleston Loop Trail.
- (3) Permit trail reconstruction and maintenance is allowed on FS system trails that pre-date the designation of the RNA; however, user expansion or realignment of designated trails, or creation of new trails is prohibited.
- (4) Permit only management practices necessary to preserve natural vegetation.
- (5) Discourage or prohibit public uses that modify the RNA.
- (6) Do not permit physical improvements. Remove human-made improvements such as artificial dams.
- (7) Encourage natural processes and protect from invasive species or pathogens.
- (8) Wildfires will be allowed to burn, unless they threaten persons or property outside RNA or pose a health of safety issue.
- (9) No cleanup or reforestation following wildfires will be authorized.
- (10) Take no action against endemic insects, diseases, or animals, without prior approval of the FS Rocky Mountain Research Station
- (11) Types of usages within the RNA are restricted to:
 - scientific research: for the study and collection of data to be used for hypothesis testing or comparative purposes;
 - passive observation and monitoring: for the collection of descriptive data that will not result in scientific hypothesis testing or comparative conclusions; and
 - educational use.

Permitting procedures and forms can be found at <http://www.fs.fed.us/rmrs/research-natural-areas/using/>.

Rock Climbing and Canyoneering

Goals

Continue to provide rock climbing opportunities while protecting resource values.

Allow for continued use and maintenance of existing bolted and non-bolted climbing routes.

Objectives

Inventory climbing routes every two years, or when five new routes occur within a given area.

Inventory climbing use annually.

Desired Future Conditions

Climbing in the Wilderness is managed to protect natural and cultural resources and Wilderness character.

Management Direction

Guidelines

- (1) Rock climbing in the Fletcher Canyon and Robbers' Roost areas (both within and outside the Wilderness boundary) will continue only on approved existing routes until surveys for species of concern are complete. After surveys have been completed, local restrictions or seasonal closures may be used to protect species of concern.
- (2) Place signs at trailheads accessing climbing areas to provide use restrictions.
- (3) Encourage coordination of efforts in management of climbing activities with climbing organizations, commercial guides/schools, and local climbing organizations.

Standards

- (4) Assess and monitor routes to determine if they present resource concerns, and remove inappropriate routes through administrative action, unless otherwise deemed necessary. Approve routes to be retained and maintained.
- (5) Allow commercial outfitter guide services for rock climbing by use permit only, and use must be deemed proper for realizing recreational or other Wilderness purposes.
- (6) No commercial services for canyoneering will be permitted.
- (7) Rock climbing within 300 feet of known active or recently active Peregrine falcon nests will be allowed only from mid-July through the end of January. If active nests are identified, the rock face on which any routes occur will be closed and signed as necessary to inform visitors of seasonal closures.
- (8) No climbing or canyoneering will be allowed within 50 feet of rock art or other heritage resource. Agency archaeologists will identify and keep record of locations of known rock art and heritage resources.
- (9) No alteration of rock surfaces by gluing, chipping, chiseling, or prying out of rocks during climbing activities will be allowed.
- (10) No alteration or removal of vegetation at the base of or along routes is allowed. The rock climbing practice of "gardening" along climbing routes is prohibited to prevent impacts to endemic cliff-dwelling plant species that occur in the Wilderness.
- (11) No permanent fixed ropes or cables will be left in place for climbing or belaying purposes (not to include chain links used for belay/rappel/toprope anchors).
- (12) Prohibit the installation of new permanent fixed anchors, unless the climbing route is approved to be maintained, in which case replacement bolts are authorized.
- (13) Bolts can only be placed using non-motorized/mechanized equipment within the Wilderness. Use of power drills is prohibited.

Signs

Goals

Install signs in appropriate locations to protect resource values and preserve Wilderness character.

Install signs at trailheads sufficient to provide necessary Wilderness education, regulation and restriction information.

Desired Future Conditions

Signs may be present within Wilderness in very rare cases, for resource protection only, with directional signing only at system trail junctions. Wilderness character is strengthened by limited signage.

Management Direction

Guidelines

- (1) Identify Wilderness boundaries with more formal signs to state the name of the Wilderness and information signs, one to three-paneled signboards containing Wilderness and natural resources interpretive information and interagency information at trailhead parking areas outside of Wilderness.
- (2) Place signs at key locations on the boundary and at designated trail entry points and other access points (trails, trailheads, and roads) where visitors are more likely to come into contact with the Wilderness.
- (3) Place a minimum amount of signs at designated trail junctions with reassurance markers placed elsewhere along the trail as necessary (e.g., where the trail crosses bedrock and the trail tread is not obvious).
- (4) Signs will be made of native material (e.g. wood, rock), a maximum of five feet high, and will be constructed in accordance with sign policy. Remove or replace all existing signs not in conformance with these standards and as necessary to protect resource values and Wilderness character.

Soils

Goals

Maintain soil quality and long-term soil productivity by maintaining soil porosity, organic matter, hydrologic function (infiltration, water table, drainage, percolation, etc.), and buffering capacity (soil filtering and chemical regulation properties).

Desired Future Conditions

Human activities do not significantly impair the ability of soils to support naturally occurring vegetation communities.

Management Direction

Guidelines

- (1) Take actions to limit soil displacement, runoff and erosion that results from human activity and authorized uses to a rate similar to natural erosion
- (2) Maintain large woody material and forest duff and litter to provide for nutrient cycling and soil organisms.
- (3) Limit areas of soil disturbance that could adversely impact vegetation, infiltration, subsurface flow, or the water table.

- (4) Refine threshold values for organic matter, erosion, and porosity to fit ecological communities and site-specific conditions as needed and as information becomes available.
- (5) Emphasize the protection of alpine and subalpine ecosystems, considering the slow recovery and sensitivity of soils and vegetation.

Standards

- (6) Apply Forest Service Region 4 Soil and Water Conservation Practices Handbook (FSH 2509.22, Ch. 10, 5/1988).
- (7) Management of soil in Wilderness is generally the same as for all National Forest watersheds (FSM 2502). However, in Wilderness natural processes shall dominate; measures that modify plant cover and treat soil mantles or other activities designed to supplement natural water yield are inappropriate (FSM 2323.42).

Structures, Administrative Sites, and Installations

Goals

Limit structures and improvements for administrative purposes or under use permit to those actually needed for management, protection, and use of the Wilderness for the purposes for which the Wilderness was established (FSM 2324.31)

Maintain or enhance the natural appearance of the Wilderness areas by removing unnecessary facilities and minimizing or restoring human caused surface disturbances.

Management Direction

Guidelines

- (1) Maintain sites and structures for administration of the Wilderness only for the protection of resources, where temporary or other management actions are not providing adequate protection (FSM 2323.13).
- (2) Encourage the placement of automated snow measurement sites (sensors) outside of Wilderness.
- (3) Evaluate all structures with the following criteria for decisions on retention and use as an administrative site.
 - Is this a historically significant structure?
 - Does the structure conflict with stated Wilderness goals, objectives, and desired condition of legislations, policy and management plans?
 - Are there less intrusive methods of achieving the purpose of the structure?
 - Can the activity associated with the site or structure be accomplished outside Wilderness and still achieve its objectives?
 - Is the activity associated with a site or structure tied to a valid existing right such as a mining claim or right-of-way easement?
 - Is there a special provision in legislation that allows this activity?
 - How does the site or structure or associated activities benefit the Wilderness as a whole as opposed to maximizing one resource?
 - Does the structure ensure that human presence is kept to a minimum and the area is affected primarily by forces of nature rather than being manipulated by humans?

- Determine if the structure is the minimum tool necessary to accomplish the activity considering, where relevant, the use of mechanized transport as an alternative.
- (4) Trees may be cut for administrative use in the construction and maintenance of authorized structures located within the Wilderness; visual quality objective of preservation must be met (FSM 2323.53(a))

Standards

- (5) Flood control devices will not be constructed in the Wilderness.

Target Shooting

Management Direction

Standards

- (1) Target shooting is prohibited in Wilderness.

Trails

Goals

Provide a transportation system that ensures suitable access for the types and numbers of trail users, protection of resources, and is consistent with management objectives for the areas accessed.

Provide backcountry/Wilderness recreation opportunities through development of the trail system at appropriate locations.

Trail systems in Wilderness will be designed for resource protection and not necessarily for hiker convenience.

Desired Future Conditions

Trails are visible in foreground, close-range views, but at middleground and background distances, trails fade out of view in the naturally evolved landscape character.

Managerial influence on trail systems is minimal to accomplish objectives of resource protection.

Management Direction

Designated Trails

Designated trails are trails identified as FS system trails and are displayed on agency Wilderness and recreation maps and maintained for general public access. There are, as of the date of this plan approval, no designated trails on the BLM portion of the Wilderness.

Guidelines

- (1) Maintain only those routes that are designated as FS system trails within the areas managed by the FS.
- (2) Maintain trails to the design specifications for that trail in accordance with the appropriate agency policy.
- (3) Consider removing trails from the system (with appropriate public involvement) when concerns are identified, such as limited or no use, catastrophic natural event,

unmitigatable resource impacts, changed from original need (i.e. unneeded mining road/trail), or others. Evaluate the need for physical closure or allow natural recovery, depending on expected resource impacts.

- (4) Emphasize trail relocation to minimize impacts on steep slopes and away from sensitive areas, such as meadows, riparian environments, known TES populations or habitat, heritage resources, and consider other limiting factors when mitigating resource impacts.
- (5) Place route markers only on FS designated system trails. Signs to mitigate resource issues may be placed in other areas, only where necessary. Signs will be made of wood, constructed in accordance with FS signage policy, and placed at designated trail system junctions, with reassurance markers placed elsewhere along trails as necessary.
- (6) Maintain system trails to meet management objectives for visitor use and resource protection.
- (7) When conducting routine trail condition surveys, identify and document resource impacts and locations.

Standards

- (8) When maintaining the Bonanza Trail switchbacks, minimize ground disturbance to protect rare plants.
- (9) Conduct ongoing monitoring using the established baseline inventory data, in conjunction with site inventory monitoring, every five to ten years, but no longer than ten years, or when driven by other management actions, to ensure that trail management objectives are consistent with area management objectives.

User-created Trails

A user-created trail is any non-constructed path created by the passage of visitors, which is discernible and would not likely recover naturally within one year. User-created trails are not part of the Forest Service Trail inventory, and do not receive funding for maintenance.

Guidelines

- (1) Discourage foot-traffic from traveling off the designated Mummy Springs Trail to promote the restoration of native vegetation in the riparian area.
- (2) Establish a baseline inventory of approximate locations of user-created trails based on identification of trails located in high-use areas, areas where user-created trails leave FS system trails, vehicle access points, and where attractive features may be present.
- (3) Actively restore and/or stabilize trails that have been abandoned (due to realignment or closure) that will not heal naturally. Some examples include abandoned trails that alter local hydrology, deeply compacted soils, and sites with continued inappropriate traffic, increased entrenchment, gullying or widening.
- (4) Evaluate existing user-created trails for their potential to be improved for inclusion in the FS trails system, or for closure and restoration. Improve user-created trails only when there is an overriding benefit to the recreating public and protection of the Wilderness resource can be provided.

Standards

- (5) Conduct ongoing monitoring of user-created trails using the established baseline inventory data, in conjunction with site inventory monitoring, every five to ten years, but no longer than ten years.

Vegetation

Goals

Manage Wilderness to maintain the desired condition of the vegetation mosaic (e.g. bristlecone pines stands are open with downed trees and old logs left in place) through natural disturbances such as fire, flood, and avalanches.

For management of insects and plant diseases in Wilderness, there are three objectives:

- a. Allow indigenous insect and plant diseases to play, as nearly as possible, their natural ecological role within Wilderness.
- b. Protect the scientific value of observing the effect of insects and disease on the ecosystems.
- c. Control insect and plant disease epidemics that threaten Wilderness resources beyond natural scope, or exotic pests that threaten an unnatural loss of Wilderness resources. Carry out control measures that have the least adverse effect on Wilderness resources and are compatible with Wilderness Management Objectives, in accordance with management direction and an approved MRDG. Pesticide and herbicide treatments on FS and BLM land will require the approval of a Pesticide Use Proposal prior to treatment.

Desired Future Conditions

There is very little vegetation loss or alteration of duff and litter layer by human use. An unmodified natural environment characterizes the area. Ecological and natural processes are minimally affected by the action of users. Environmental impacts are low and restricted to minor losses of vegetation where camping occurs and along travel routes. Most impacts recover on an annual basis and are apparent to few visitors.

Management Direction

Guidelines

- (1) Management tools, such as mechanical treatment or prescribed burning, will be used to achieve the desired conditions for the vegetation mosaic only if natural processes are not achieving goals and objectives.
- (2) No special management actions will be taken to try to mitigate or repair the visual damage from natural events and processes such as rock slides, avalanches, or tree mortality from insect and disease.
- (3) Allow indigenous insect and plant diseases to play, as nearly as possible, their natural ecological role within Wilderness to protect the scientific value of observing effects on the ecosystem.
- (4) Control insect and plant epidemics and exotic pests that threaten Wilderness resources beyond a natural scope, as deemed appropriate by a MRDG and NEPA compliance, if necessary.

- (5) Allow natural ecological processes to determine the composition and distribution of plant communities.
- (6) Monitor Threatened, Endangered, Proposed or Sensitive (TEPS) species to ensure protection of these species and their habitat and develop management actions consistent with Wilderness values, where appropriate to help ensure their protection.

Standards

- (7) Where monitoring indicates visitor use and trampling impacts to sensitive plants are occurring and may be affecting the vigor or reproductive capacity of the populations, relocate or modify trails or campsites as needed to prevent a loss of viability or trend to federal listing of any sensitive plant species.
- (8) On FS land, tree cutting is prohibited in Wilderness (36 CFR 293.6), except for administrative purposes as stated in this plan and emergencies. On BLM land, tree cutting is prohibited in Wilderness (43 CFR 6302.20(g)), except as necessary in emergencies involving the health and safety of persons, as provided for in the Wilderness Act.

Vehicle Access Points and Designation of Trailheads

Goals

Increase awareness of the Wilderness and prevent mechanized travel within the Wilderness.

Prevent unauthorized motorized vehicle travel through the management of vehicle access points.

Interpretive information about the Wilderness will be included at all existing and proposed trailhead information signs to insure the people using these access points are aware that they are entering a Wilderness and are informed about rules, regulations and "Leave No Trace" principles.

Management Direction

Guidelines

- (1) Unobtrusive informational signs will be placed at informal access points. Signs should encourage users to stay on trails.
- (2) Place vehicle barriers in locations where natural barriers are not adequate to keep vehicles from being driven into the Wilderness areas, using the least intrusive method appropriate for the location. Use one or a combination of the following methods:
 - Wilderness signs
 - Land restoration (i.e. revegetation or rock scatter)
 - Berms
 - Large boulders
 - Posts
 - Fences and/or gates

Standards

- (2) All motorized/mechanized vehicle use will be permitted only up to Wilderness boundaries and trailheads.

- (3) All road closures at the Wilderness boundary will be signed. Turnarounds and parking areas will be added at appropriate locations.
- (4) Extension of existing roads across the Wilderness boundary by informal use is prohibited.
- (5) Determine methods of removal, restoration and rehabilitation of roads within Wilderness and use the minimum tool to accomplish the objective of either road removal or incorporation into existing trails system.

Water Quality and Springs

Goals

Manage Wilderness uses to avoid degrading water quality.

Water quality is protected from human-caused degradation in order to retain pristine Wilderness values.

Desired Future Conditions

Riparian and stream channel conditions show no measurable degradation due to human uses.

Soil compaction has been reduced and native vegetation has returned to areas surrounding springs.

Floodplains are uninhibited and acting as energy dispersers.

Management Direction

Guidelines

- (1) Discourage foot-traffic and camping at Mummy Spring by removing visitor-made trails and trail signage, and restoring native vegetation in riparian areas.
- (2) Protect habitat of riparian-dependent species (including herpto-fauna, macro invertebrates, fish, and endemic plants) from human-caused conditions that could lead to a federal threatened or endangered species listing.
- (3) Any effects on water quality from management or recreation activities should be negligible so that water quality returns on an annual basis to its previous level once the activity ceases.

Standards

- (4) Apply Forest Service Region 4 Soil and Water Conservation Practices Handbook (FSH 2509.22, Ch. 10, 5/1988).
- (5) Management of soil and water is generally the same as for all National Forest watersheds (FSM 2502). However, in Wilderness natural processes shall dominate; measures that modify plant cover and treat soil mantles or other activities designed to supplement natural water yield are inappropriate (FSM 2323.42).

Wild Horses and Burros

Goals

Periodic gathers may occur to achieve Appropriate Management Level (AML) within BLM Herd Management Areas (HMAs) or FS Wild Horse and Burro Territories (WHBT).

Desired Future Conditions

Wild horses and burros are not found within the Wilderness.

Management Direction

Guidelines

- (1) Control wild horse and burro access into the Wilderness; favor control measures outside of Wilderness where prudent and feasible.
- (2) In cases where impacts to springs and riparian systems result from wild horses or burros, mitigation measures may be employed to prevent further degradation or to restore Wilderness character.

Standards

- (3) If gathers are necessary, on-the-ground activities within Wilderness will be accomplished on foot or by horseback. If a MRDG and NEPA analysis warrants, the use of motorized means (aircraft and helicopters) for horse gathers and to survey, capture, and monitor wild horses or burros in the Wilderness may be permitted with approval of the FS Regional Forester or BLM Southern Nevada District Manager.

Wildlife

Goals

Protect indigenous wildlife from human caused conditions that could lead to Federal and/or Regional listing as a TEPS species.

Protect and assist in the recovery of listed TEPS species and their habitats.

Recovery Plans for all federally listed species will govern management activities that may affect those species; restrictions on recreation and other uses may be necessary.

Implement wildlife management activities to prevent degradation to or to enhance Wilderness characteristics by promoting healthy, viable, and more naturally distributed wildlife populations and/or their habitats.

Wildlife management activities for the FS will be guided by the Wilderness Act, the Humboldt-Toiyabe National Forest LRMP, the SMNRA GMP, and will be in conformance with State and Federal laws. For the BLM, wildlife management activities will be conducted in accordance with the Amendment to Memorandum of Understanding between the BLM and the Nevada Department of Wildlife, Supplement No. 9, Wildlife Management in Nevada BLM Wilderness Areas, and the Las Vegas RMP.

Management Direction

Guidelines

- (1) Activities involving wildlife damage management will be approved by the BLM and FS and conducted by the USDA Animal and Plant Health Inspection Service (APHIS).

Standards

- (2) Give first priority to locating habitat improvement projects outside Wilderness for the benefit of wildlife that spend only part of the year in Wilderness (FSM 2323.35a). Only

allow water source developments in Wilderness to improve desert bighorn sheep habitat. These developments must protect Wilderness character.

- (3) Entry into Wilderness using motorized or mechanized means for wildlife management activities, including wildlife relocation or capture, necropsy, wildlife research, and retrieval of Very High Frequency (VHF)/Global Positioning System (GPS) telemetry collars or other types of tracking devices that have dropped off study animals, will be allowed only if deemed necessary by an MRDG. Approval must be made by the FS Regional Forester or BLM Southern Nevada District Manager (FSM 2326.04b).

Monitoring Program

Monitoring Goals and Objectives

- 1) Monitor key variables to understand the conditions, risks and the threats to the Wilderness resource. Establish benchmark or reference monitoring. Develop reporting and documentation techniques and protocols. Conduct monitoring procedures in a manner compatible with the preservation of Wilderness values.
- 2) Monitor for change in conditions over time. Identify unacceptable adverse impacts. Determine when, where, and why changes are occurring.
- 3) Conduct inventory and monitoring with an integrated resource approach, to the best extent possible.
- 4) Provide information to improve management decisions, policies, actions and evaluate for effectiveness. Inform decisions that have an effect on the Wilderness resources.
- 5) Monitor management strategies and actions, and assess the benefits and costs, in time, money, and effectiveness and to the Wilderness character.
- 6) Engage in collaboration amongst managers, scientists, public, and academic institutions. Communicate with local, regional, and national agencies and all interested publics. Describe, communicate, and demonstrate the effects of management and use on the Wilderness resource.

The agencies have established Wilderness at the Primitive end of a Recreation Opportunity Spectrum. The Primitive recreation opportunity provides a very high degree of naturalness and very high opportunities to experience solitude, closeness to nature and self-reliance, which result in unique and highly favored recreational experiences; however, recreational use of Wilderness must be closely managed and monitored to assure that degradation of resource values does not occur.

Monitoring is associated with specific Wilderness characteristics and tracks the outcome of proposed activities on the quality of Wilderness character. The impacts of a single activity may affect multiple qualities of Wilderness character. Monitoring can improve understanding of an activity's effects whether intentional or unintentional. Unauthorized activities will also be addressed in the monitoring system.

For the FS, the Wilderness component of the forest plan shall include monitoring requirements for determining whether prescriptions, standards, and guidelines are met (FSM 2322.03). Monitoring will determine how well objectives have been met and how closely management standards and guidelines have been applied. The plan monitoring program sets out plan monitoring questions and associated indicators that are designed to inform management of resource conditions in Wilderness, including

relevant assumptions and changes, and measuring the effectiveness and program toward maintaining the Wilderness plan's desired future conditions and objectives (36 CFR 219.12 (a)(2)).

The FS will monitor the elements in the tables below, funding permitting, for baseline information or changes in baseline. If areas of degradation are detected, appropriate measures will be taken, commensurate to the potential severity of the impact and needs of the area. Appropriate measures may range from education, to maintenance, to closure. Closures may be invoked but are not necessarily the first choice. As per the authority of the Organic Act of 1897, the Forest Supervisor may invoke special orders at any time for the protection of the resource.

The monitoring of wilderness character on that portion of the Mount Charleston Wilderness administered by BLM will follow those indicators identified in "Measuring Attributes of Wilderness Character: BLM Implementation Guide" BLM Manual 6340.

The following monitoring strategies will respond to maintaining five qualities of Wilderness Character.

Untrammeled

Wilderness is essentially unhindered and free from modern human control or manipulation.

Monitoring Plan for Campsites

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
What are the density and condition class ratings?	Density of sites, density of vegetation, total area of campsite, bare mineral soil, camp development, social trails, mutilations of vegetation, and distance to water. <u>Monitoring Technique</u> Field reviews	10% of the Wilderness per year over a ten-year reporting period.	Percent of total campsites inventoried and proximity of sites; campsite condition class should not exceed a 3.0 rating; groundcover and severely damaged trees should not exceed a rating of 2.0; campsite density not to exceed more than 3 Wilderness campsites per 1,000 acres.	Establish destination quotas or reduce use when campsite condition or campsite density standards are exceeded; close and rehabilitate campsites when not in compliance; require Wilderness permits.
How successful are campsite closures, rehabilitation, containment of the site, and other management	Campsite closures <u>Monitoring Technique</u> Field reviews	10% of the Wilderness per year over a ten year reporting period.	Percent of total campsites re-established and proximity of sites.	Remove and rehabilitate campsites as necessary.

actions?				
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***Indicator to initiate further evaluation and/or a change in management direction**

Monitoring for Visitor Use

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Is visitor use impacting untrammeled character of wilderness?	Use levels on trails to assess need for the Wilderness permitting system. <u>Monitoring Technique</u> Field reviews	Annually.	Increase in overall use of more than 30% from current levels; increase in site density; impacts to resource conditions at campsites.	Institute Wilderness permit system or other appropriate management actions.

Natural

Area appears to have been primarily affected by the forces of nature.

Monitoring Plan for Noxious Weeds and Non-native Invasive Species

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Are noxious weeds, non-native plant populations, or exotic pests present in the Wilderness?	Non-native plants; exotic pests <u>Monitoring Technique</u> Visual observations; field surveys	10% of the Wilderness per year over a ten year reporting period.	Percent of non-native plant populations, invasive species, or exotic pests observed.	Humboldt-Toiyabe Weed Management Plan; Pesticide Use Proposal.

***Indicator to initiate further evaluation and/or a change in management direction**

Undeveloped

Area is essentially without permanent improvements or human occupation and retains its primeval character.

Monitoring Plan for Vehicle Access Points and Designation of Trailheads

Monitoring question	Activity, practice, or effect to be measured; monitoring	Measuring frequency	Indicator*	Protocol to meet plan standards
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	technique			
Are vehicle incursions occurring in Wilderness?	Vehicle and/or OHV tracks <u>Monitoring Technique</u> Field reviews of road closures, turn-arounds and parking areas at Wilderness boundaries, using established baseline inventory data	10% of the Wilderness per year	Vehicle incursions occurring at Wilderness boundaries.	Employ appropriate management actions, block access; place signage; close parking areas.

***Indicator to initiate further evaluation and/or a change in management direction**

Monitoring Plan for System Trails and User-created Trails

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Are trails adequately maintained?	System trails; percentage of change of trail depth and width at transect points, boggy areas, resource damage, safety concerns. <u>Monitoring Technique</u> Field reviews	10% of the Wilderness per years over ten year reporting period.	The percent of system trails identified by condition surveys to have resource problems (i.e., excessive erosion, etc.). 20%: No more than 20 percent of the system trail miles would have identified resource problems.	Institute trail maintenance, closures, or Wilderness permits.
Are user-created trails increasing in frequency?	User-created trails; resource damage, safety concerns. <u>Monitoring Technique</u> Field reviews using baseline inventory of user-created trails.	10% of the Wilderness per year over ten year reporting period.	Percent of increase in user-created trails. 20%: No more than 20 percent increase in user-created trails.	Assess user-created routes and consider adding to system if appropriate; otherwise, closure and rehabilitation, or other appropriate options may be necessary.

***Indicator to initiate further evaluation and/or a change in management direction**

Monitoring for Rock Climbing Routes and Use

Monitoring question	Activity, practice, or effect to be	Measuring frequency	Indicator*	Protocol to meet plan standards
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	measured; monitoring technique			
Have climbing routes and climbing use increased?	<u>Routes</u> : number of rock climbing routes; route density. <u>Use</u> : number of rock climbers; resource impacts; bolt proliferation. <u>Monitoring Technique</u> <u>Routes</u> : site visitation and review using baseline inventory of climbing routes. <u>Use</u> : site visitation, user counts, vehicle counts, bolt counts, resource monitoring.	<u>Routes</u> : every five years. <u>Use</u> : annually.	<u>Routes</u> : any increase in new routes within a given area; increase in route density, based on existing route inventory; impacts to species of concern and other resources; bolt proliferation. <u>Use</u> : rock climber numbers and distribution of users.	Require site surveys and possible route closures, or authorize other appropriate options.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation

Area provides outstanding opportunities for people to experience solitude or primeval and unrestricted recreation including the values associated with physical and mental inspiration and challenge.

Monitoring for Visitor Encounters, Group and Commercial Services

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Are group size and visitor encounters affecting solitude character?	Solitude and primeval Wilderness values <u>Monitoring Technique</u> Field observations; contacts with use permittees; citations issued for exceeding group size or stay limits; use levels to determine correlation between use levels, resource impacts and opportunity for solitude.	Annually	Increase of 50% or more in the following: <u>recreational riding</u> —combination of people and stock not to exceed 24, with no more than 15 stock animals in any one group; <u>outfitter guide restrictions</u> —numbers determined by condition by site-specific needs and objectives; day limits—30 days per year on S. Loop	Place limitation on group size or pack or saddle stock.

			Trail; 14 days camping; <u>groups of any kind</u> —15 participants.	
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***Indicator to initiate further evaluation and/or a change in management direction**

Unique and Supplemental Values

Wilderness areas may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Monitoring for Sensitive and Alpine Areas

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Is visitor use having a negative impact on vegetation in sensitive or alpine areas?	Alpine and springs vegetation <u>Monitoring Technique</u> Field reviews of soil compaction, erosion, vegetation loss and equestrian use that may be contributing to the introduction of non-native species; springs vegetation.	Every five to ten years.	Alpine species composition and abundance; springs, water sources, riparian areas vegetation and soil impacts.	Establish destination quotas to alpine or sensitive areas; require use permits to alpine areas or sensitive springs.

***Indicator to initiate further evaluation and/or a change in management direction**

Monitoring Plan for Heritage Resources

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Are existing heritage or cultural resources damaged or lost by visitor use or management activities?	Heritage and cultural resources <u>Monitoring Technique</u> Field reviews	Annually	The percent of previously recorded cultural resource sites receiving annual site inventory and evaluation and evidence of damage or loss to existing and known cultural or heritage resources.	Employ appropriate management practices to eliminate or reduce adverse effects to historic and prehistoric sites and places.

***Indicator to initiate further evaluation and/or a change in management direction**

Monitoring Plan for Research Natural Area

Monitoring question	Activity, practice, or effect to be measured; monitoring technique	Measuring frequency	Indicator*	Protocol to meet plan standards
Are the natural and scientific values of the RNA being maintained?	Evidence of visitor use <u>Monitoring Technique</u> Field observations	Annually	Physical improvements; human-made improvements present in RNA; evidence of camping.	Remove human-made improvements or prohibit public uses that modify the RNA.

***Indicator to initiate further evaluation and/or a change in management direction**

Plan evaluation

This management plan will be revised when the management actions prescribed no longer meet the Wilderness management objectives or when a change in the existing situation warrants revised management. The need for revision would be reviewed every five years and if the decision is made to revise the plan, then it will be accomplished with public participation. Minor revisions such as typographical or cartographical errors may be made by inserting an errata sheet. Administrative actions will be evaluated using the MRDG and NEPA analysis, if necessary.

Plan Implementation Sequence

Management of the Mt. Charleston Wilderness will be carried out in accordance with this plan under the direction of the BLM and FS agency management. Three types of management activities may occur: 1) ongoing activities carried out through the life of the plan; 2) management activities triggered by changes in conditions as detected through monitoring; and, 3) activities that may be proposed in the future for which general guidance exists in the plan, or that may not be addressed in the plan. The following list shows the actions needed for accomplishing management activities of the plan. The actual implementation could be altered based on funding and staff availability outside the control of this plan.

Ongoing activities

- Maintaining boundary signs.
- Monitoring visitor uses, natural resources, trail conditions, and Wilderness character.
- Monitoring the effectiveness of signs and possible removal or repair.
- Monitoring staging areas for use and maintenance.
- Dissemination of visitor information.
- Issuing and monitoring permit activities such as commercial tours, educational/school visits, and geological study/sampling.
- Removing graffiti and repair of vandalism.
- Approval or disapproval of climbing routes.
- Posting temporary signs for example fire prevention, safety and conservation messages.
- Enforcement of regulations.
- Monitoring wild horse and burro populations.

- Controlling non-native plants.
- Management of social conditions.

Actions that require a use prohibited in Section 4(c) of the Wilderness Act and are not fully described and analyzed in the plan, or other actions that are not adequately described and analyzed require separate environmental analysis and public involvement, pursuant to NEPA.

Appendix A

Map of Mt. Charleston Wilderness



